

recording and writing are interconnected and are associated in the same specific data recording device 204.

Another modification of the transfer system will now be described by reference to FIG. 7, which shows the special construction of the recording means in accordance with the invention.

There will be recognised in this Figure most of the elements described with reference to FIG. 5; they carry the same references, that is to say: the client's card 201, the writing device 204b, the recording device 204a, etc. In this case the recording means 208 is composed of the following elements:

On the one hand an independent portable electronic device 219 (for example a card) comprising a possible programmable inert memory 218 associated with a control circuit 218a and connected to coupling means 217.

On the other hand (in the specific recording device 204a) writing means 215 connected to reading means 206 and to coupling means 216 (these coupling means 216 are arranged to be coupleable to the coupling means 217 of the card 219). The writing means are arranged to write into the memory of the card 219 the data read by the reading means 206 in the memory 202 of the card 201.

Owing to this second card it now becomes possible to store in an easily transportable manner all or a part of the data contained in the card 201 and transferred to the recording device 204a. This card 219 may in its turn be read in another device comprising reading means, another recording device, for example. The writing device 204b, the presence of which is indispensable only in certain applications, allows new data to be written either in the card 1 (when this comprises a programmable memory providing sections for recording), or in the card 219; this writing device may be placed at any suitable position where writing must be effected.

It is clear that the recording means 208 described with reference to FIGS. 4 to 6 may be constructed as has just been described with reference to FIG. 7. In particular, the device 204 (described with reference to FIG. 4) installed at a trader's premises, may comprise such a recording means 208. Thus the trader has in his possession a trading card on which are automatically recorded the number of the client's bank account and the amount of the purchase. These trading cards play the part of a virtual connection between the point of sale and the bank; on each go and return journey between the point of sale and the bank, this latter (by means for example of a reading device associated with a central computer) learns the contents of the memory, causes the amounts of the various sales to be paid by the banks of the various purchasers and credits the trader's account. In addition the new data may be introduced into the trader's trading card; for example, a list of the numbers of the cards of clients with respect to whom a banking objection is raised. It is thus possible, owing to the system of client's cards and trading cards, to exchange data without telephone communication and in arbitrary language between clients and traders who are geographically dispersed and towards a central organisation: a bank.

FIG. 8, which represents a more general transaction system, will now be described. In this system all the cards are identical, and the distinction between "client" and "trader" vanishes.

The apparatus 230 here includes two inputs 231 and 232 for the cards A and B, a value selector 233 (for example with "code wheels") together with an operation selector 234 allowing a choice between the two following operations:

A pays B

A is paid by B

The transaction takes place if the two parties push their buttons 235 and 236 at the same time; in this case the gate 237 is enabled energizing the unlocking conductor 238. The apparatus may include two confidential key-boards 239 and 240 serving to identify the bearers of the cards A and B.

Such an apparatus, arranged in such a manner as to be fraud-proof, is installed at any location at which a transaction is to be effected, and thus allows all cash money to be dispensed with. Each proprietor of a card, by showing possession of a certain sum of money (arising automatically from his salary, for example), will as a preliminary, 'load' his card with that amount of money, for example in a bank. The card is afterwards 'discharged' little by little, to the amount of the disbursements which he effects by means of the machines 230. If, on the other hand, he receives on his card more money than he expends, he may in the same manner 'empty' his card at the bank, thus crediting his account (in the case of a trader, for example).

Other types of data than numerical may obviously be exchanged by means of such a system of cards: especially alpha-numerical data for example in the body of an individual health record, or, for example, in connection with a system of check-points (each point being provided with a reader/memory programmer).

What is claimed is:

1. A system for data transfer between a first and a second population of persons, the persons in each of said populations being at dispersed locations, said system being characterized by including:

a. a plurality of independent data recording devices placed at fixed locations;

b. a plurality of first portable electronic devices each carried by a respective one of said persons, each said portable electronic devices comprising:

b₁. first memory means;

b₂. coupling means operable at will temporarily to couple said first memory means to one of said data recording devices;

b₃. memory control circuits coupled with said coupling means and said memory means; said memory means and said memory control circuits being in the form of logic micro-structures;

c. each said data recording device comprising:

c₁. reading means operable to read the contents of said memory means in said portable electronic devices when said memory means is coupled to said data recording device by said coupling means;

c₂. data recording means coupled to said reading means to record data reading thereby.

2. The invention claimed in claim 1, wherein said data recording means comprises:

a. writing means disposed within said recording means;

b. at least one further independent portable electronic device including;